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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,185	04/17/2006	Shin Kikuchi	4496-13	7334

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EXAMINER	
OLSEN, LIN B	

ART UNIT	PAPER NUMBER
3661	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,185	KIKUCHI ET AL.	
	Examiner	Art Unit	
	LIN B. OLSEN	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on April 17, 2006 was filed before the mailing date of the first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims fail to define a statutory process. There does not appear to be sufficient structural and functional interrelationships between the computer program and other claimed elements of a computer or processor which permit the computer program's functionality to be realized. For the claim to be statutory there is a requirement that there be a functional interrelationship among the data and the computing processes performed when utilizing the data. A process consisting solely of mathematical operation does not manipulate appropriate subject matter and thus cannot constitute a statutory process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **1-2, 7, 10-11, 14 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Pub. No. 2004/0157587 to Park (Park) in view of U.S. Patent No. 6,831,911 to Sridharan et al. (Sridharan). Park is concerned with a

GPS/Phone that notifies the user of incoming calls. Sridharan is concerned with a system and method for receiving and processing GPS and wireless signals.

Regarding independent **claim 1 and 11** where claim 11 is a method claim incorporating the device of claim 1, "A mobile navigation device comprising:

a navigation control module that transmits a destination and a starting point via a network and/or a present position fixed via a GPS means, to an information distribution computer system, together with a request for routing guidance, and performs routing guidance on the basis of information delivered by the information distribution computer system;" – In Park, Fig 5a and in paragraph [34], the general operation of a GPS phone conforming to the description above is assumed, with the Mobile device displaying a map showing the current position displayed on the map and directions for route guidance indicated.

"a telephone communication control module for effecting telephone communication with other mobile telephones; and" – As described in Park paragraph [5], the controller 100 implements various functions as well as telecommunications.

"an operation control module for controlling the navigation control and telephone communication control modules; and wherein:" – In Park paragraph [5], the controller 100 is further for controlling the various processes implements by the mobile unit.

"upon detecting a particular event while the navigation control module is in operation, the operation control module sends a suspension command to the navigation control module, thereby suspending operation of the same; and

upon detecting termination of the particular event, the operation control module sends a resumption command to the navigation control module to resume operation." – Park does not suggest automatically suspending navigation control based on an event, but Sridharan at col. 6 lines 7-24 details that when a user desires to receive a call, the invention suspends the GPS reception and resumes operation when the call is completed. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the known Sridharan technique to improve the similar Park device to yield an improved device that worked in the same way when an event occurred.

Regarding **claim 2,** which is dependent on claim 1, "wherein the particular event referred to is a telephone call coming from another mobile telephone." - see col. 6 lines 7-24 of Sridharan.

Regarding **claims 7 and 14**, which are dependent on claims 1 and 11 respectively, "wherein GPS communication is stopped in the process of suspending operation of the navigation control module." – At Sridharan col. 6 lines 10-11, suspending reception of GPS signal is a response to the event.

Regarding **claims 10 and 16**, which are dependent on claims 1 and 11 respectively, "wherein GPS communication commences in the process of resuming operation of the navigation control module." - At Sridharan col. 6 lines 23-25 – when the phone signal has been received the GPs receiver can be switched to operational mode.

Claims **3, 5, 8, 12 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park/Sridharan as applied to claim1 above, and further in view of U.S. Patent No. 6,314,308 to Sheynblat et al. (Sheynblat). Sheynblat is concerned providing reserve power in a cellular telephone which may include a GPS unit.

Regarding **claim 3**, which is dependent on claim 1, "wherein the particular event consists of a warning that the remaining power of the battery is at or below a certain level." – Park/Sridharan does not mention that a low power warning could be the event, but Sheynblat explicitly tests the Battery level. In Sheynblat Fig. 2, the battery level is tested and if below a threshold, an action - placing the phone system in lower power mode - is dictated. It would have been obvious to one of ordinary skill in the art at the time of the invention to recognize low battery power as an event requiring response, in order to use a known technique to improve a similar device in the same way as Sheynblat operated.

Regarding **claims 5 and 12**, which are dependent on claims 1 and 11 respectively, "wherein the power to the GPS means is turned off in the process of suspending operation of the navigation control module." At col. 5, lines 3-5 Sheynblat recites that one low power mode may be that only the telephone circuitry remains powered after the detection.

Regarding **claims 8 and 15**, which are dependent on claims 1 and 11 respectively, "wherein the power to the GPS means is turned on in the process of resuming operation of the navigation control module." - In Sheynblat Fig. 2, the monitor continually checks to see whether the battery is above the predetermined threshold, and if it is provides power to all the phone system components including the GPS.

Claims **4, 6, 8, 13, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Park/Sridharan as applied to claim 1 above, and further in view of U.S. Patent Pub. No. 2005/-164688 to Satake (Satake). Satake is concerned ways of controlling a mobile terminal.

Regarding **claim 4,** which is dependent on claim 1, "wherein the particular event consists of a warning that the system resources of the navigation device are insufficient." – Park/Sridharan do not mention checking to see whether sufficient resources are available for executing the navigation task, but Satake in Fig. 9 shows on starting application, checking for sufficient memory. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate such a test in the Park/Sridharan system to use a known technique to improve a similar device (a software program) in the same and assure that the mobile phone not freeze up due to overtaxing the resources.

Regarding **claims 6 and 13**, which are dependent on claims 1 and 11 respectively, wherein resources acquired for navigation are released in the process of suspending operation of the navigation control module. While Satake in Fig. 9 shows an operator selecting which application to suspend, it is well known in the art to substitute a predetermined choice for operator input when no options are desired. Thereafter Satake shows pausing or quitting the application to release resources since when the program executes step S802, the memory usage no longer exceeds the threshold.

Regarding **claims 9 and 17**, which is dependent on claims 1 and 11 respectively, wherein resources needed for navigation are acquired in the process of resuming operation of the navigation control module. In Satake, when the new application is the navigation application, the resources are freed up based on the priority of the applications.

Regarding independent **claim 18**, "A control program for a computer device comprising:

a navigation function wherein the navigation control module transmits a destination and a starting point via a network and/or a present position fixed via a GPS means, to an information distribution computer system, together with a request for routing guidance, and performs routing guidance on the basis of information delivered by the information distribution computer system;

a telephone communication control function for effecting telephone communication with other mobile telephones; and

an operation control function, being a control program that causes such computer device to realize the function of turning off and on the GPS means, using the telephone communication control as trigger." – This control program performs the functions of claim 11 and is rejected under Park/Sridharan for the same reasons

Regarding **claim 19**, which is dependent on claim 18, "wherein the computer device is made to realize the function of releasing resources acquired for navigation when the GPS means is turned off." - This control program performs the functions of claim 13 and is rejected under Park/Sridharan/Satake for the same reasons

Regarding **claim 20**, which is dependent on claim 18, wherein the computer device is made to realize the function of stopping GPS communication when the GPS means is turned off. - This control program performs the functions of claim 14 and is rejected under Park/Sridharan for the same reasons

Regarding **claim 21**, which is dependent on claim 18, wherein the computer device is made to realize the function of commencing GPS communication when the

GPS means is turned on." This control program performs the functions of claim 16 and is rejected under Park/Sridharan for the same reasons

Regarding **claim 22**, which is dependent on claim 18, wherein the computer device is made to realize the function of acquiring resources needed for navigation when the GPS means is turned on." This control program performs the functions of claim 17 and is rejected under Park/Sridharan/Satake for the same reasons

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,529,493 to Varin for a mobile phone incorporating a Positioning system; U.S. Patent No. 6,590,525 to Yule et al. for a GPS Phone with a dormant mode for the GPs; U.S. Patent No. 7,057,372 to Chen at al. for a battery management system cognizant of multiple subsystems; U.S. Patent Pub. No. 2001/0029196 to Wakamatsu for management of applications in a mobile phone with battery monitoring; U.S. Patent Pub. No.2002/0114324 to Low et al. for suspending an Internet process to make a call on a mobile device; and U.S. Patent Pub. No. 2004/0027474 to Aoyama et al. for a camera phone with management of interactions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. B. O./
Examiner, Art Unit 3661

/Thomas G. Black/

Supervisory Patent Examiner, Art Unit 3661